05-GF-113
(5460)



January 7, 2003

Mr. Scot Cullen, Chief Electric Engineer
Public Service Commission
610 N. Whitney Way
P.O. Box 7854
Madison, WI 53707-7854

RE: In the Matter of Filing Reporting Requirements for Appropriate Inspection and Maintenance, PSC Rule 113.0607(6)

Dear Mr. Cullen:

Enclosed for filing are 3 copies of Shullsburg Electric Utilitiy's report to the commission, submitted every two years, showing compliance with its Preventative Maintenance Plan.

Very truly yours,

Ronald Schardt

Ronald Schardt
Supt.

Enclosures

# TWO YEAR REPORT DOCUMENTING COMPLIANCE WITH THE PREVENTATIVE MAINTENANCE PLAN

## SHULLSBURG ELECYRIC UTILITY

**FILING DEADLINE**
**FEBRUARY 1, 2003**

January 7, 2003

Ron Schardt{Contact Person}
112 S Galena
{City, State, Zip Code}Shullsburg WI. 53586
608 965 4901
SEUPOWER.mwt.net



This report format was prepared by the MEUW work group for PSC Rule 113.0607 for use by the 82 municipal electric utilities in Wisconsin and endorsed by PSC staff as meeting the requirements of Rule PSC 113.0607.

## I Reporting Requirements: PSC 113.0607(6) states;

Each utility shall provide a periodic report to the commission showing compliance with its Preventative Maintenance Plan. The report shall include a list of inspected circuits and facilities, the condition of facilities according to established rating criteria, schedules established and success at meeting the established schedules.

## II Inspection Schedule and Methods:

| SCHEDULE: | MONTHLY | ANNUAL | EVERY 5 YEARS |
|---|---|---|---|
| Transmission (≥69Kv) | | X | X |
| Substations | X | X | |
| Distribution (OH & UG) | | | X |

METHODS: Five criteria groups will be used to complete the inspection of all facilities.

1. IR – infrared thermography used to find poor electrical connections and/or oil flow problems in equipment.
2. RFI - Radio Frequency Interference, a byproduct of loose hardware and connections, is checked using an AM radio receiver.
3. SI – structural integrity of all supporting hardware including poles, crossarms, insulators, structures, bases, foundations, buildings, etc.
4. Clearance – refers to proper spacing of conductors from other objects, trees and conductors.
5. EC – equipment condition on non-structural components such as circuit breakers, transformers, regulators, reclosers, relays, batteries, capacitors, etc.

Distribution facilities will be inspected by substation circuits on a 5 year cycle such that the entire system will be inspected every 5 years. Inspector instructions for inspecting all facilities and forms are included in the plan.

## III Condition Rating Criteria

This criterion, as listed below, establishes the condition of a facility and also determines the repair schedule to correct deficiencies .

0) Good condition
1) Good condition but aging
2) Non-critical maintenance required – normally repair within 12 months
3) Priority maintenance required – normally repair within 90 days
4) Urgent maintenance required – report immediately to the utility and repair normally within 1 week

## IV Corrective Action Schedule

The rating criteria as listed above determine the corrective action schedule.

## V Record Keeping

All inspection forms and records will be retained for a minimum of 10 years. The inspection form contains all of the required critical information i.e. inspection dates, condition rating, schedule for repair and date of repair completion.

## VI Reporting Requirements

A report and summary of this plan's progress will be submitted every two years with the first report due to the Commission by February 1, 2003. The report will consist of a cover letter documenting the percent of inspections achieved compared to the schedule and the percent of maintenance achieved within the scheduled time allowance.

## VII Inspected Circuits and Facilities

| Circuit # and description | Substation |
|---|---|
| | |
| | |
| | |
| | |
| | |

Base load and peaking generation, less than 50 megawatts per unit in size, is typically subject to pre-operational checks, in addition to checks and maintenance during and after periods of operation. Emergency generation is test run and maintained every *(type in a period of time not exceeding one month)*to confirm its operational readiness.

## VIII Scheduling Goals Established and Success of Meeting the Criteria:

*PSC staff expects a narrative listing goals and if they were achieved.*

*Example:*

> "It was this utility's goal to complete all monthly substation inspections, annual transmission line inspections and to inspect 40% of the distribution system. In addition, we expected to complete all scheduled maintenance resulting from the inspections within the prescribed time periods specified in the rating criteria.

All of the inspection goals were met or exceeded. 50% of the distribution system was inspected rather than 40%. 3 urgent maintenance items were found and repaired within 7 days. Of the 24 priority and non critical maintenance items found, 20 were repaired on time. The remaining 4 are located on a section of the system that is being converted to a higher distribution voltage next spring and will be repaired at that time. The 50 year old Main Street Feeder will be rebuilt in the year 2004."

## IX Facility condition – rating criteria:

*PSC staff is looking for a narrative on the overall condition of the electric utility.*

*Example:*

"All of the inspection goals were met and exceeded. Ninety percent of our utility has been rebuilt within the last fifteen years. uring the This past year we had Northwind Tecknical Services map our utility . Three major problems were found and corrected.past two years, 50% of the distribution system was inspected and all substation inspections were completed on time. Of the items found requiring maintenance, all were repaired before they were responsible for an outage to customers. Storm related outages have been minimal and equipment failure only accounted for 1 outage affecting 15 residential customers. Most of the system is less than 20 years old and is in excellent condition."